### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Madhav Datta et al

Dated:

Serial No.

Filed:

For:

METHOD FOR TESTING CHIPS ON FLAT SOLDER BUMPS

Docket No.:

YO998-431/433 (64,610-042)

### **APPOINTMENT OF ASSOCIATE ATTORNEY**

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

The undersigned attorney, who has been appointed as an attorney in the Combined Declaration and Power of Attorney for the above-identified application, hereby appoints RANDY W. TUNG (Registration No. 31,311) of TUNG & ASSOCIATES, 838 W. Long Lake Road, Suite 120, Bloomfield Hills, Michigan 48302, (Telephone: (248) 540-4040) his associate attorney to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith.

Please direct all official communications to Randy W. Tung at the address cited above.

Respectfully submitted, Attorney for the Applicant(s)

By:\_

Robert M. Trepp

Registration No. 25,933

Telephone: (914) 945-3147

IBM Corporation
Intellectual Property Law Department
P. O. Box 218
Yorktown Heights, New York 10598
IBM Docket No.: YO-998-431/433

أربه فح سنبور

### **DECLARATION FOR PATENT APPLICATION**

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled "METHOD FOR TESTING CHIPS ON FLAT SOLDER BUMPS" the specification of which

X is attached hereto.	
was filed on	as
Application Serial No	
And was amended on	
(If applicable)	

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendments referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56, a copy of which is attached.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application(s) for patent on inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign	Application(s)	<u> I</u>	<u>Priority Claimed</u>			
	• •					
Number	Country	Day/Month/Year	(Yes) (No)			
Number	Country	Day/Month/Year	(Yes) (No)			
Number	Country	Day/Month/Year	(Yes) (No)			

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I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application Ser. No.	Filing Date	Status	
Application Ser. No.	Filing Date	Status	

I further declare that I do not know and do not believe that the invention claimed in this application was ever known or used by others in this country before my invention thereof, or patented or described in any printed publication in any country before my invention thereof, or more than one year prior to this application or any prior U.S. application above identified in which said invention may have been disclosed, or in public use or on sale in the United States of America for more than one year prior to this application or any prior U.S. application above identified in which said invention may have been disclosed.

#### **POWER OF ATTORNEY**

As a named inventor I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith (list name and registration number):

Manny W. Schecter 31,722; Terry J. Ilardi 29,936; Christopher A. Hughes 26,914; Edward A. Pennington 32,588; John E. Hoel 26,279; Joseph C. Redmond, Jr. 18,753; Kevin M. Jordan 40,277; Stephen C. Kaufman 29,551; Jay P. Sbrollini 36,266; David M. Shofi 39,835; Robert M. Trepp 25,933; Louis P. Herzberg 41,500; Daniel P. Morris 32,053; Douglas W. Cameron 31,596 and Paul J. Otterstedt 37,411.

Please send all correspondence and direct telephone calls concerning this application to the following address:

Randy W. Tung, Reg. No. 31,311 TUNG & ASSOCIATES 838 W. Long Lake Road Suite 120 Bloomfield Hills, Michigan 48302 Phone: (248) 540-4040 Fax: (248) 540-4035

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application and of any patent issued thereon.

Full name of first joint inventor	Madhay Datta
ž	First Middle Last
Inventor's Signature	Adhan Jate
Date	3/22/99
Residence	816 Wildwood Court, Yorktown Hts, N, westcherty County.
Citizenship	Indiam.
Post Office Address	(Same)
Full name of second joint inventor	Peter A. Gruber First Middle Last
Inventor's Signature	Pete a. Bula
Date	3/22/99
Residence	5D Kings Ct. MoheganLake, NY 10547
Citizenship	USA
Post Office Address	(Same)

Full name of third joint inventor	Judith M. Rubino  First Judith M. Rubine  Rubino  Rubino  Rubino  Rubino  Rubino
Inventor's Signature	Judith M. Loldon (gmr)
Date _	April 5 1999
Residence	11 Waterview Drive Ossining N.y. 1050
Citizenship	USA
Post Office Address	Same as abore
Full name of fourth joint inventor	Carlos J. Sambucetti First Middle Last
Inventor's Signature	First's man Jarenton colle
Date	April 5 1999
Residence	4 Sassi Dorve Crotor Hudson N.Y. USA
Citizenship	USA
Post Office Address	Same as above

Full name of fifth joint inventor	George		<u>Walker</u>	
•	First	Middle L	Last /	
Inventor's Signature	Jeony :	7 Wa	lky	
Date	Mel 5	1999	//	M. 100.
Residence	1540 YARK AU	e APT# 11K	. flew frk	[V. ]. 100 s
Citizenship	1/5/			
Post Office Address	414 £ 19	Anove.		
Full name of sixth joint inventor	First	Middle	Last	
Inventor's Signature				
Date				
Residence				
Citizenship				
Post Office Address				

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§1.56 Duty to disclose information material to patentability

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
  - (1) prior art cited in search reports of a foreign patent office in a counterpart application; and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
  - (2) It refutes, or is inconsistent with, a position the applicant takes in:
  - (i) Opposing an argument of unpatentability relied on by the Office, or
  - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
  - (1) Each inventor named in the application;
  - (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent or inventor.
- (35 U.S.C. 6, Pub. L. 97-247)

[42 FR 5593. Jan. 28, 1977, as amended at 47 FR 21751, May 19, 1982; 48 FR 2710, Jan. 20, 1983; 49 FR 554, Jan. 4, 1984; 50 FR 5171, Feb. 6, 1985; 53 FR 47808, Nov. 28, 1988, effective Jan. 1, 1989; 57 FR 2034, January 17, 1992, effective March 6, 1992]



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

OCTOBER 08, 1999

**PTAS** 

TUNG & ASSOCIATES
RANDY W. TUNG
838 W. LONG LAKE ROAD
SUITE 120
BLOOMFIELD HILLS, MICHIGAN 48302



UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/29/1999

REEL/FRAME: 010150/0631

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

DATTA, MADHEV

DOC DATE: 04/12/1999

ASSIGNOR:

GRUBER, PETER A.

DOC DATE: 04/12/1999

ASSIGNOR:

RUBINO, JUDITH M.

DOC DATE: 04/05/1999

ASSIGNOR:

SAMBUCETTI, CARLOS J.

DOC DATE: 04/05/1999

ASSIGNOR:

WALKER, GEORGE F.

DOC DATE: 04/05/1999

ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES

CORPORATION

ARMONK, NEW YORK 10504

010150/0631 PAGE 2

SERIAL NUMBER: 09301889

PATENT NUMBER:

FILING DATE: 04/29/1999

ISSUE DATE:

PEARLENE FOSTER, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

PT	PTO-1595 RECORDATION FORM COVER SHEET u.s. DEPARTMENT OF COMMERCE Patent and Trademark Office PATENTS ONLY					
То	To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy					
1	Name of conveying party(les): MADHEV DATTA, PETER A. GRUBER, JUDITH M. RUBINO, CARLOS J. SAMBUCETTI AND GEORGE F. WALKER	l Ir	Name and address of receiving party(ies): nternational Business Machines Corporation Armonk, New York 10504	/29/		
	Execution Date: March 22, 1999 and April 5, 1999	A	Additional name(s) & address(es) attached □ Yes ■ No			
4	Application number(s) or patent number(s):					
	If this document is being filed together with a new application	n, the ex	ecution date of the application is: $04-12-99$			
	A. Patent Application No(s).	В	3. Patent No(s)			
	Additional numbers a	ttached?	? □ Yes ≅ No			
5 Name and address of party to whom correspondence concerning document should be mailed:  6 Total number of applications and patern to the concerning document should be mailed:						
	RANDY W. TUNG Tung & Associates 838 W. Long Lake Road Suite 120 Bloomfield Hills, Michigan 48302	8	Fotal fee (37 CFR 3.41) \$40.0  Enclosed  Authorized to be charged to deposit according			
		<b>—</b>	Deposit Account Number:			
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9	To the best of my knowledge and belief, the foregoing information the original document.  Randy W. Tung Name of Person Signing Signature	nation is	true and correct and any attached copy is a true of 04-29-99 Date	copy of		
	Registration No. 31,311  Total number of pages including cover sheet, attachments, and document: 3					

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

(64,610-042)

Page 1 of 3

### **ASSIGNMENT**

Whereas, we

Inventor and City

(1) Madhev Datta County of Westchester

Of Yorktown Heights, eer and State of New York

(2) Peter A. Gruber County of Westchester

Of Mohegan Lake and State of New York

(3) Judith M. Roldan Rubino County of Westchester

Of Ossining, and State of New York

(4) Carlos J. Sambucetti
County of Westchester

Of Croton-on-Hudson and State of New York

(5) George F. Walker County of Westchester

Of New York, And State of New York

have invented certain improvements in

TITLE:

METHOD FOR TESTING CHIPS ON FLAT SOLDER BUMPS

and executed, respectively, a United states patent application therefor on

DATES THAT

(1) April 12, 1999

2) April 12, 1999(3) April 5, 1999

INVENTORS SIGNED THE DECLARATION

(4) April 5, 1999

(5) April 5, 1999 (6)

WHEREAS, INTERNATIONAL BUSINESS MACHINES CORPORATION, A Corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM) desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

NOW, THEREFORE, for valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby sell, assign and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

CITY DATE	Signed and sealed (1) at Yorkion Agith on 4/12/99	Madhav First Name	Middle Initial	Datta Last Name	(Signature) (Inventor)
CITY DATE	Signed and sealed (2) at linkton Heights on 3/22/99 4/12/99 7.6	Peter First Name	A. Middle Initial	Gruber Last Name	(Signature) (Inventor)
CITY DATE	Signed and sealed (3) at Yarkin Highla on 4/5/49	Judith First Name	M. Rubino Middle Initial	Judith o-Roldan Last Name	ith N. Robins M. Rubins (Signature) (Inventor)
CITY DATE	Signed and sealed (4) at Yorklown Heyll on April 5, 94	Carlos First Name	J. Middle Initial	Sambucetti Last Name	(Signature) (Inventor)
CITY DATE	Signed and sealed (5) at YAKTOUN FIRM on ARIL 5,1999	George First Name	F. Middle Initial	Walker Last Name	(Signature) (Invent or)

	On this 12th day of April, 1999, before me personally came Madhav Datta,
Inventor	to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.
	same as his free act and deed.
	Notar MICHELLE PARRA
	Notary Public, State of New York No. 01PA5089349
	On this <u>nh</u> day of <u>A</u> , 1999, before me believe the personally known, and known to me to be the person described in and who
Inventor	executed the foregoing assignment, and he acknowledged to me that he executed
(2)	the same as his free act and deed.  MICHELLE PARRA Notary Public, State of New York  Lichelle Gause
	No. 01PA5089349  Qualified in Dutchess County  Commission Expires December 8, 1999  (Notary)
	On this 5K day of April, 1999, before me personally came Judith M. Roldan
Inventor	to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and she acknowledged to me that she executed
(3)	the same as her free act and deed.
	( liebelle our.
	(Notary) MICHELLE PARRA Notary Public, State of New York
	On this ZY day of Ay 1999, before mainternment of arlos J
	Sambucetti, to me personally known, and known to shie to be the person deserted
Inventor	and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.
(4)	executed the same as his free act and deed.
	(Notaichelle Parra Notary Public, State of New York No. 01PA5089349
	On this 5 day of 1999, before me personally came George F. Walker
	to me personally known, and known to me to be the person described in and who
Inventor "	executed the foregoing assignment, and he acknowledged to me that he executed
(5)	the same as his free act and deed.
	(Notary) MICHELLE PARRA
	No. 01PA5089349
	Qualified in Dutchess County  Commission Expires December 8, 1999

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PTC	1-1595 11-29-99 LOOKE	Patent and Trademark Office
Tot	he Honorable Commissioner of Patents and T. 10	11.14045 11.14045 attached original documents or copy thereof.
Ma Ju	Name of conveying party(ies): dhev Datta, Peter A. Gruber, dith M. Rubino, Carlos J. Sambucet d George F. Walker	2 Name and address of receiving party(ies): International Business Machines ti Corporation Armonk, New York 10504
	Nature of conveyance:  ■ Assignment □ Merger	Additional name(s) & address(es) attached □ Yes ≅ No
(	□ Security Agreement □ Change of Name	
	Other: March 22, 1999/April 5, 1	999
4	Application number(s) or patent number(s):	7mmil E 1000
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	A. Patent Application No(s).	B. Patent No(s)
		tached? □ Yes ⊠ No  6 Total number of applications and patents involved:
5	Name and address of party to whom correspondence concerning document should be mailed:	1
	RANDY W. TUNG Tung & Associates	7 Total fee (37 CFR 3.41) \$40.00
	838 W. Long Lake Road Suite 120	⊠ Enclosed
	Bloomfield Hills, Michigan 48302	□ Authorized to be charged to deposit account
	•	8 Deposit Account Number: 50-0484
		(Attach duplicate copy of this page if paying by deposit account)
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9	Statement and signature.	
	To the best of my knowledge and belief, the foregoing information the original document.	nation is true and correct and any attached copy is a true copy of
	RandyW. Tung	8-3-99 Date
	Name of Person Signing Signature Registration No. 31,311	1
1	Total numi	b r of pages including cover sheet, attachm nts, and d cument : 2

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Execution Date: March	22, 1999 and April	5, 1999		Additional	name(s	s) & address(es	) attached 🗆 Y	res ≅ No U
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9 Statement and signature	e. · /							
To the best of my know the original document.	rledge and belief, th	e foregoing inform	nation	is true aı	nd corre	ect and any a	ttached copy	is a true copy of
Randy W. Tung Name of Person Signing Registration No. 31,311	<u></u>	Signature			_	04- Date	29-99	
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